

Remarks Regarding the Amendments

Claim Number	Remark
1	Amended to include limitation that regions are blocks as in block polymer. Support is found at page 4, see particularly the second paragraph.
7	Amendment is non-substantive, clarifying the formula only.
8	Amendment corrects the dependency of the claim to be claim 7. There was no antecedent basis in claim 6 for Ar.
13	Combines the limitations of previous claims 13 and 14. This was needed because of practical unavailability of multiple dependency in the U.S. and the structure of claim 15.
14	Cancelled. Limitations added to claim 13.
16	Added a missing dash in "n-alkyl"
20	Combines limitations of previous claims 20 and 21 due to structure of claim 22 and practically unavailability of multiple dependency in the U.S.
21	Cancelled. Limitations added to claim 20.
23	Combines limitations of previous claims 23 and 24 due to structure of claim 25 and practically unavailability of multiple dependency in the U.S.
24	Cancelled. Limitations added to claim 23.
27	Corrects the dependency of claim.
28	Corrects the dependency of claim.
30	Amendment is non-substantive, clarifying the formula only.
40	Inserts formula instead of simply referring to formula XI.
41	Corrects apparent typographic error.
42	Amended to include limitation that regions are blocks as in block polymer. Support is found at page 4, see particularly the second paragraph.
44, 46, 47, 49	Corrects formula so that it is clear that x, y, etc. components are required – i.e. clarifies that compound cannot be homopolymer.
50	Corrects dependency.
51, 52, 53, 56, 60	Clarifies that claimed compound cannot be homopolymer.
61-116	These claims were added because they had previously been indicated to be allowable over the earlier prior art if rewritten as independent claims. In view of the change of approach in the most recent office action, this option was effectively removed. Therefore, these claims have now been cancelled.
118	This new independent claim corresponds to claim 22 which the Examiner had indicated would be allowable if rewritten so as not

	to depend from a rejected claim.
119	This new independent claim corresponds to claims 23-25 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
120	This new claim corresponds to claim 26 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
121	This new claim corresponds to claims 27-28 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
122	This new claim corresponds to claim 44 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
123	This new claim corresponds to claim 46 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
124	This new claim corresponds to claim 47 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
125	This new claim corresponds to claim 49 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
126	This new claim corresponds to claim 51 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
127	This new claim corresponds to claim 52 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
128	This new claim corresponds to claim 53 which the Examiner had indicated would be allowable if rewritten so as not to depend from a rejected claim.
129	This new claim corresponds to previous claim 60.
130	This new claim corresponds to previous claim 61.

Response to the Rejection

Claims 1-3, 6-20, 29-39, 59-78, 90-101, and 113-117 were rejected under 35 U.S.C. § 102(e) as anticipated by Inbasekaran. Claims 1-60 as amended require that the polymer be a block copolymer where each block in the copolymer comprises the components that provide one of the emissive, the positive charge transport, or the negative charge transport functionalities.

Inbasekaran teaches polymers that have fluorine monomeric units and at least two additional charge transporting monomeric units. Inbasekaran does not teach use of block copolymers where each block provides a distinct function in the electroactive polymer. Rather, Inbasekaran teaches that these polymers may be made by nickel catalyzed coupling reactions, which yields essentially random copolymers, or polymers may be made by palladium catalyzed reactions, e.g. Suzuki coupling. In the latter instance an A type monomer, which is a diboronic acid ester, reacts with a B type monomer, which is a dihalide, to provide alternating AB structures. While two or more A type monomers and two or more B type monomers may be used, there is no suggestion of making a block copolymer by this approach.

Therefore, claims 1-60 are not anticipated by Inbasekaran.

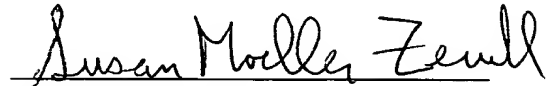
Claim 117 requires that the first region components are selected such that the LUMO is between the work function of the work function of the cathode and the LUMO level of the emissive material as is discussed at page 9, lines 2-5. Similarly, the components of the second region are selected such that the HOMO of the second region is between the work function of the anode and the HOMO level of the emissive material as is discussed at page 10, lines 6-10. Inbasekaran contains no specific teaching that would have led a skilled worker to select components for hole transport segment and electron transport segment based on the work functions of the anode or cathode and the HOMO and LUMO levels of the emissive portion. Therefore, claim 117 should be considered patentable over Inbasekaran.

New claims 118-128 are rewritten versions of claims which the Examiner previously indicated to be allowable.

New claims 129 and 130 recite a polymer having two different triarylamine type groups. The Inbasekaran reference relied upon by the Examiner does not teach any such polymers but rather requires the presence of a fluorine monomeric group. Thus, these claims are also patentable over Inbasekaran.

In view of the above amendments and discussion, an allowance of all pending claims is requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Susan Moeller Zerull", written over a horizontal line.

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